22.— SHAMMING DEATH'—SNAKES

Dunbar Brander's letter in Vol. 46, No. 2, inviting further observation on animals shamming death opens up an interesting

subject.

I have always kept a mongoose as a pet in the house, and had a dozen or more over a period of 30 years. With these I staged fights with snakes especially cobras. The cobra in fact is the only snake that would put up a fight to the finish. The others kraits, wolf-snakes, and water snakes will either curl up or bury their heads in the coils and resign themselves to death.

The Chequered Watersnake (N. p. iscator) in particular will sham death'. I have had them do so on several occasions. Specimens from four feet or more to eighteen inches. I will go further and say that for proof of this one need only get one of these snakes and allow a mongoose to worry it and a perfect

'shanming' will follow.

This is done by the snake sometimes standing up and striking at the mongoose three or four times after which it sinks to the ground and in slow motion turns over on to its back maintaining a slow muscular movement similar to a snake with its head beaten in.

The mongoose as often as not will leave the snake without biting or harming it in any way. When danger seems past the snake makes a hasty retreat only to repeat the 'shamming' when the mongoose arrives.

This is no exception but the rule with this species and need

only be tried out for proof.

H.Q., Bombay Area. BOMBAY. 29th February 1947

A. St. J. MACDONALD

23.—AN UNCOMMON HABIT OBSERVED IN THE FROG RANA ERYTHRÆA SCHLEG

The curious habit of leaping over the surface of the water which is so typical of the Water Skipper, Rana cyanophlyctis. Schneid is well-known to be very uncommon amongst Indian frogs generally. This habit has also been attributed to the Indian Bull-Frog, Rana tigrina Daud. but has not yet been authenticated, as far as I am aware. Furthermore, even if the species is able to, it certainly does so very seldom. Boulenger (1890), Fauna of British India, states of R. tigrina, 'It is essentially aquatic, and is said, when frightened, to jump over the surface of the water much in the same way as on land.' W. S. Berridge in 'All About Reptiles and Batrachians (1935)' also states, 'When endeavouring to escape capture it has the curious habit of leaping over the surface of water just as if it were upon land.' With reference to this habit in two other species, C. McCann (1932), 'Notes on Indian Batrachians', Journal of the B.N.H.S., Vol. xxxvi, No. 1, speaking of the habit in R. cyanophlyctis states, 'I know of no other frog that is capable of performing this feat, though it has been

attributed to R. limnocharis and R. hexadactyla. Annuadale has rightly pointed out that R. limnocharis is quite incapable of performing this feat and that R. hexadactyla does so quite feebly on

account of its large size.

As regards my own observations of Iudian frogs, I can assert, without any measure of doubt, that Rana erythraea frequently leaps over the surface of the water when alarmed. At Mymensingh, Bengal, in July 1944, I observed this species and made the following recording in my note-book:—These batrachians were found in quite large numbers round the borders of some small ponds, chiefly amongst the vegetation. On being disturbed, they either swim away from the edge, or, more frequently, they jump away over the surface of the water in a manner akin to the habit of Rana cyanophlyctis. They are, however, very much lighter on the surface than R. cyanophlyctis, and appear to use this habit as much, or even more.' In the case of cyanophlyctis, the movement may be described as a 'skip' or 'shuffle' over the surface, but eruthraea moves by a series of distinct jumps.

I suspect that R. limnocharis also sometimes practises this habit, though less frequently, and more after the manner of R. cuanophluctis. My evidence on this point is, unfortunately,

not quite conclusive.

96, Mortlake Road, Kew, Surrey, England, 25th February 1947.

J. D. ROMER, F.Z.S.

.24.—MATING AND THE PARENTAL INSTINCT OF THE MARSH CROCODILE (C. PALUSTRIS LESSON)

There is practically no scientific data on how Crocodiles mate, and I think, few people have seen crocodiles in the act of mating. It was not until recently this year that I could safely say that I had seen it. It was on the 19th March that my brother K. S. Nirmalkumarsinhji and I motored to the Shetrunji River. Here, at one of the deep 'Dharas' (deep pools) we saw two crocodiles swimming on the surface of the water, heading to meet each other. Then as they reached one another, one of them made a swirl as it turned round and dived. It reappeared some distance away and then followed the other until the leading crocodile dived. I have witnessed such behaviour time and again and since this was at the height of the mating season it was no surprise to me.

Then we drove to another 'Dhara' where we had news of two large crocodiles, and on arriving there, we waited for an hour without seeing anything. After lunch taking up my field-glasses I noticed a crocodile with head and tail out. I passed the glasses to my brother to have a look, remarking at the same time that one had already appeared. Looking in he said there were two and mating, and handed back the glasses. And there they were, head,

¹ Rec. Ind, Mus., Vol. XV, p. 122 (Bombay Streams Fauna).